REMARKS

Claims 37, 39, 41-43, 45-47 were pending in the subject application. Applicants have added claim 48. Support for claim 48 may be found, *inter alia*, on page 26, lines 3-10 and page 24, lines 1-6. Applicants respectfully request entry of the amendment such that claims 37, 39, 41-43, 45-48 will be pending.

Specification

Applicants acknowledge that the Examiner has withdrawn the objection to the abstract in view of Applicants' amendent.

Claim rejections 35 USC 112 2nd Paragraph

Applicants acknowledge that the Examiner has withdrawn the objections to claims 37, 39, 41 and 43 in view of applicants' amendments.

Claim Rejections 35 USC 112 1st Paragraph (New Matter)

Claims 37, 39, 41-43 are 45-47 are rejected under 35 USC 112 1st paragraph as allegedly failing to comply with the written description requirement. The Office Action alleges that the claims contain subject matter which was not described in the specification in such as way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the invention.

The Office alleges that two features of the claims are not described in the specification. First it alleges that "the specification does not provide support for oligonucleotides that hybridize to the complement of SEQ ID NO:1 as recited in claim 37 and claim 45." In addition, the Office Action alleges that "the specification does not provide support for oligonucleotides that hybridize to SEQ ID NO:1 or a portion thereof as recited in claim 45."

Applicants traverse this ground of rejection. MPEP 2163 (I)(B) states that "newly added

claim limitations must be supported in the specification through express, implicit or inherent disclosure."

Applicants submit that the disclosure provides both express and inherent support for the use of the phrase "complement thereof." Page 24, lines 19-26 state as follows: "The present invention includes [...] nucleic acid sequences which hybridize to all or a portion of the cdc25 A or cdc25 B gene or a complement of either gene [...]" (emphasis added). This section of the specification provides express support in accordance with MPEP 2163 (I)(B). Inherent support is further provided on page 26, lines 3-10 of the specification:

> In one embodiment, complex formation is prevented in an indirect manner, such as by preventing transcription and/or translation of the cdc25 DNA and/or RNA. This can be carried out by introducing into cells antisense oligonucleotides which hybridize to the cdc25-encoding nucleic acid sequences, and thus prevent their further processing.

It is evident that DNA encoding cdc25 has both a sense and an antisense strand. Thus, an oligonucleotide may hybridize to either strand to prevent further processing. Accordingly, the specification provides sufficient inherent disclosure of oligonucleotides which hybridize to either SEQ ID NO:1 (a sequence encoding cdc25) or to its complement.

With respect to the second objected term "portion thereof," Applicants respectfully submit that the Examiner appears to have misread claim 45. As stated above, the Office Action alleges that "the specification does not provide support for oligonucleotides that hybridize to SEQ ID NO:1 or a portion thereof as recited in claim 45." Applicants submit that claim 45 does not recite oligonucleotides that hybridize to a portion of SEQ ID NO:1. Rather, claim 45 recites an "oligonucleotide that (i) is complementary to the sequence set forth in SEQ ID NO: 1 or to a portion thereof" (emphasis added). The oligonucleotide recited in claim 45 is complementary to a portion of SEQ ID NO:1. Claim 45 does not state that the oligonucleotides must hybridize to a portion of SEQ ID NO:1. While the oligonucleotide of claim 45 would surely hybridize to a portion of SEQ

ID NO:1, it would do so as a necessary function of the fundamental nature of complementary nucleic acid sequences, and in any case this is not what the claim recites. The Office Action, therefore, objects to language which is absent from claim 45.

Applicants submit that the language that is present in claim 45 is expressly supported by the specification. The recitation in claim 45 of an oligonucleotide that is complementary to the sequence set forth in SEQ ID NO: 1 or to a portion thereof is described, for example, on page 24, lines 1-6 of the originally filed specification: "all or a portion of the nucleotide sequence of the cdc25 A gene or the cdc25 B gene (see FIG. 1) can be used in hybridization methods or amplification methods known to those of skill in the art" (emphasis added). Accordingly, the specification provides express support for the claimed use of portions of the cdc25A gene for hybridizing to a cdc25 polynucleotide and inhibiting transcription and/or translation of cdc25.

Furthermore, at the time the application was filed, it was well known in the art that expression of a gene could be inhibited using oligonucleotides that represented portions of the gene *i.e.* an oligonucleotide comprising the entire gene was not necessary. For example, U.S. Patent No. 5,271,941, which granted prior to the filing of the subject application, teaches oligonucleotides of 15 to 30 nucleotides in length for effecting inhibition of the human regulatory subunit RIα of cAMP-dependent protein kinases (see claim 1). Similarly, claim 1 of U.S. Patent No. 5,268,295 teaches "[a] single or double stranded DNA molecule having a nucleotide sequence consisting essentially of at least about 20 nucleotide of the nucleotide sequence SEQ ID NO:1 or a sequence complementary to at least about 20 nucleotides of SEQ ID NO:1, substantially free of other mammalian DNA sequences" useful for reducing gene expression of mammalian adipocyte protein p154.

In view of the above arguments, applicants respectfully request reconsideration and withdrawal of this ground of rejection.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that the pending claims are in condition for allowance. Early and favorable reconsideration is respectfully solicited. The Examiner may address any questions raised by this submission to the undersigned at 617-951-7000. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-1945, under Order No. GPCI-P10-019 from which the undersigned is authorized to draw.

Dated: June 13, 2005

Respectfully submitted,

By _____

Ignacio Perez de la Cruz
Registration No.: 55,535
Fish & Neave IP Group
ROPES & GRAY LLP
One International Place
Boston, MA 02110-2624
(617) 951-7000
(617) 951-7050 (Fax)
Attorneys/Agents For Applicant